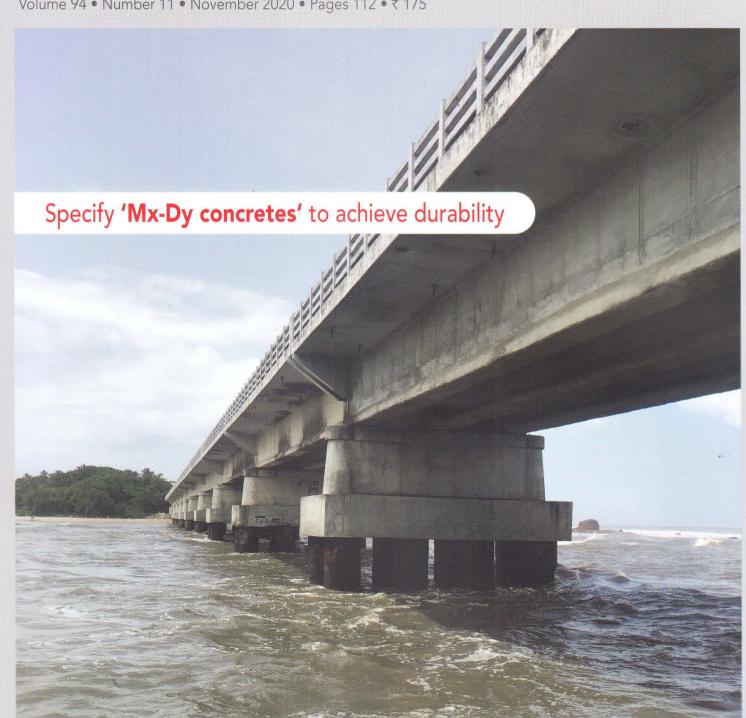




THE INDIAN CONCRETE JOURNAL

Published by ACC Limited

Volume 94 • Number 11 • November 2020 • Pages 112 • ₹ 175



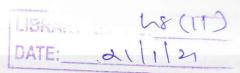


ISSN (Digital): 0019-4565

Founded in 1927

Published by ACC Limited, L.B. Shastri Road, Near Teen Haath Naka, Thane (West) 400 604. The contents of this journal are contributions of individual authors, and reflect their independent opinions, findings, conclusions and recommendations and do not necessarily imply that they reflect the views of the Publisher, ACC Limited. The Publishers are not liable for any damage or inconvenience caused to anyone who may have acted on the information contained in the publication.

This is a Scopus* indexed journal.





Cover image source:
Dr. Radhakrishna G. Pillai

enhance corrosion resistance and extend the service life of bridges.

Use of supplementary cementitious materials, corrosion inhibitors,

metallic coatings, and

cathodic protection

systems are vital to

04

EDITORIAL

PART I: FEATURES

06

NEWS and EVENTS

PART II: TECHNICAL PAPERS

07

Corrosion measurements in concrete structures and interpretation of data

Carmen Andrade

16

The corrosion behavior of rebar in metakaolin and red mud blended concrete exposed to chloride and sulfate solutions

U. Raghu Babu, B. Kondraivendhan

29

Corrosion inhibitor for preventing carbonation induced rebar corrosion

Kulwinder Kaur, Sorabh Saluja, Shweta Goyal, Bishwajit Bhattacharjee Performance evaluation of organic bipolar corrosion inhibiting admixture

P. N. Ojha, Puneet Kaura, Piyush Mittal

54

Enhancing service life of prestressed concrete structures by using fly ash and corrosion inhibitors

Dyana Joseline, Radhakrishna G. Pillai

68

Service life of reinforced concrete (RC) systems with cement-polymer-composite (CPC) coated steel rebars

E. K. Arya, Alan Verghese Ittyeipe, Deepak K. Kamde, B. S. Dhanya

81

Performance of galvanized steel rebars in concrete

M.S. Haji Shejk Mohammed, V. Roopa

M.S. Haji Sheik Mohammed, V. Roopa

92

Corrosion-induced cracks in concrete exposed to 1D and 2D chloride ingress

Ze Gyang Zakka, Mike Otieno

101

Hybrid anodes for accelerated cathodic protection of corroding concrete structures

Naveen Krishnan, Zameel D. V., Dhruvesh Shah, Haixue Liao

The Indian Concrete Journal, ISSN 0019-4565 Copyright © 2020 ACC Limited. All copyright in all materials published in The Indian Concrete Journal are owned by ACC Limited. None of this material may be used for any commercial or public use, other than for the purpose of fair dealing, research or private study, or review of the contents of the journal, in part or in whole, and may not be reproduced or stored in any media for mass circulation without the prior written consent of the publisher.

CIRCULATION OFFICE: The Indian Concrete Journal, ACC Limited. L.B. Shastri Road, Near Teen Haath Naka, Next to Eternity Mall, Thane (West) 400 604, Maharashtra, INDIA. Website: www.icjonline.com e-mail: info@icjonline.com editor@icjonline.com